

20''

Color TFT LCD Monitor

User's Manual

<p>Important Notice Please read this manual carefully.</p>

FCC and CE Radiation Norm

FCC

This equipment has been tested and found to comply with limits for Class B digital device pursuant to Part 15 of Federal Communications Commission (FCC) rules.

CE

This equipment has been tested and found to comply with the limits of the European Council Directive on the approximation of the law of the member states relating to electromagnetic compatibility (89/336/EEC) according to EN 55022

Class B.

FCC and CE Compliance Statement

These limits are designed to provide reasonable protection against frequency interference in residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed or used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in television reception, which can be determined by turning the equipment off and on. The user is encouraged to try and correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna**
- **Increase the separation between the equipment and the receiver**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected to.**



CAUTION!

The Federal Communications Commission warns the user that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Precaution

Read all of these instructions and save this manual for later use. Follow all warnings and instructions on the product.

1. Do not cover or block the ventilation holes in the case.
2. Do not insert sharp objects or spill liquid into the LCD monitor through the cabinet slots; this may cause accidental fire, electric shock or failure.
3. Unplug the unit when not in use for an extended period of time.
4. Do not attempt to service this product yourself, as opening or removing the cover may expose you to potential electric shock. Only a qualified technician should service this product.
5. Do not touch the screen directly with your fingers as it may damage the screen; the oil from your skin is difficult to remove.
6. Do not apply pressure to the screen, the LCD is very delicate.
7. Keep the monitor away from extreme heat, cold or humid places.
8. Do not place directly under sunlight, dusty surroundings or near equipment, which may generate strong magnetic fields.
9. **Please keep at least 2 seconds between each time turn ON/OFF the monitor.**

Introduction

Product Description

Thank you for purchasing the features of a MONITOR with a THIN FILM TRANSISTOR Liquid Crystal display (TFT-LCD). This new generation of TFT-LCD incorporates a high quality display in a lightweight module.

Unlike CRT displays, the LCD panel has a fixed pixel format over a set area. So, for best performance the “native resolution” setting is recommended.

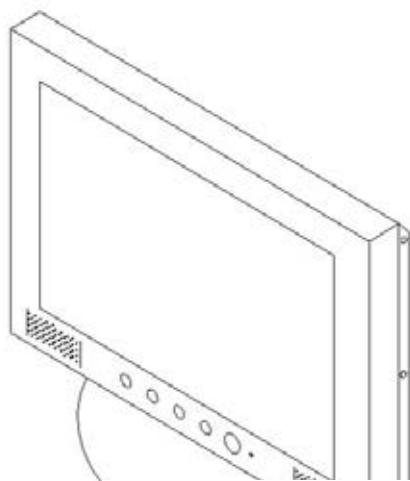
For **20” LCD monitors** : The native resolution of the LCD panel is **1600 x 1200**.
Recommended resolution is 1280 x 1024 @ 60Hz or 1024 x 768 @ 60Hz



Package Contents

Please check the TFT-LCD Monitor Package to make sure it contains the following items:

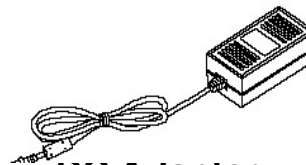
LCD Monitor



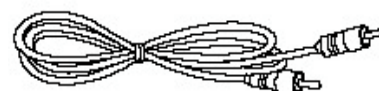
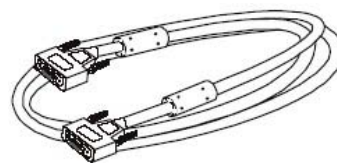
Power Cord

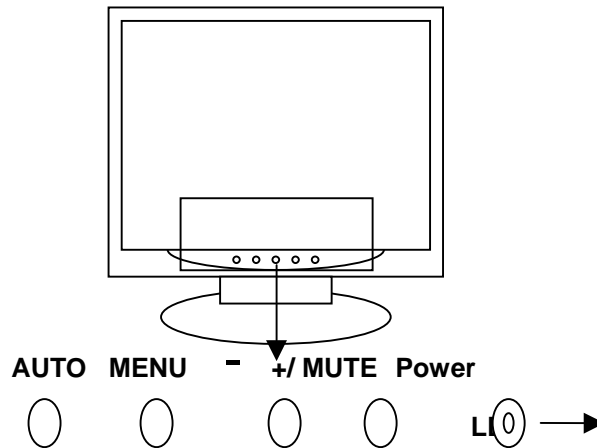


DC Adapter



VGA Cable





Power : Power on/off control

Auto : Automatically adjusts for an optimal image.

Menu : Selects command function

- : Decreases value.
When OSD not on the screen, push " - " for volume adjust.

+ / MUTE : Increase value.
When OSD not on the screen, push " +/MUTE " to enable/disable volume MUTE function .

LED : Power On: Green Light
Power Saving or No Signal: Orange Light

Menu Operating Instructions

Your LCD monitor allows you to easily adjust the characteristics of the image being displayed.

All of these adjustments are made using the control buttons on the front of the monitor. While you use these buttons to adjust the controls, the OSD (On Screen Display) shows you their numeric values as they change.














AUTO	1. Auto adjusting for an optimal image.
MENU	1. Opens the OSD. (On Screen Display) 2. Select the highlighted function.
POWER	1. Turns ON/OFF the monitor. 2. Indicates the status of the monitor. <ul style="list-style-type: none"> ● Green: Normal operation. ● Orange: Power saving mode or disconnected signal cable.
-	1. Decrease the values of the selected function. 2. Move the selector light-bar down. 3. When OSD not on the screen, push "-" for volume adjust.
+ / MUTE	1. Increases the values of the selected function. 2. Move the selector light-bar up. 3. When OSD not on the screen, push "+ / MUTE" to enable/disable volume MUTE.

Direct Access Features

1. Push "**AUTO**" can get the optimal image.
2. With the OSD off, push the "**MENU**" button to display the main OSD menu.
3. Use " **+** / **-** " buttons to select the function, and press the "**MENU**" button once to activate the selected function.
4. After selecting a function, use the " **+** / **-** " buttons to make necessary adjustments. The setting bar moves and the numeric value indicator changes to reflect your adjustments.
5. Select the "EXIT" icon to return to the main menu to select another function or to exit from the OSD. The new Settings will be automatically saved.
6. **When OSD not on the screen** : push " **-** " can into volume adjust function.
push " **+ / MUTE** " can enable/disable volume MUTE function.

On Screen Display (OSD)

Functions Adjustment

Item	Description
 AUTO SETUP	Automatically adjust for an optimal image.
 BRIGHTNESS	Adjust the brightness scale.
 CONTRAST	Adjust the contrast scale.
 DISPLAY ADJUST	Adjust the horizontal, vertical, frequency, and phase scale.
 COLOR TEMPERATURE	To select the 9300K, 7500K, 6500K, and RGB color temperature.
 LANGUAGE	Select OSD language.
 OSD DISPLAY	Adjust OSD display.
 VGA / DVI	Select Analog or Digital signal input. (This function only work on DVI model with DVI graphic card)
 AUDIO	Adjust the speaker volume.
 RECALL	Reset all functions to factory settings.
 EXIT	Exit the OSD.

Normally , for **VGA** analog signal input , after “ **AUTO SETUP** ” can get the optimal image performance . No necessary to manual adjust.

When **DVI** digital signal input , “ **AUTO SETUP** ” and “ **DISPLAY ADJUST** ” function is not necessary. The image performance depends on your graphic card.

Display Modes

Mode	Resolution	Vertical Frequency (Refresh Rate)
1	640 X 350	50Hz
2	640 X 350	60Hz
3	640 X 350	70Hz
4	720 X 400	50Hz
5	720 X 400	60Hz
6	720 X 400	70Hz
7	640 X 480	50Hz
8	640 X 480	60Hz
9	640 X 480	66Hz
10	640 X 480	72Hz
11	640 X 480	75Hz
12	800 X 600	56Hz
13	800 X 600	60Hz
14	800 X 600	72Hz
15	800 X 600	75Hz
16	1024 X 768	60Hz
17	1024 X 768	70Hz
18	1024 X 768	72Hz
19	1024 X 768	75Hz
20	1280 X 1024	60Hz
21	1280 X 1024	75Hz
22	1600 X 1200	60Hz

To set the Time Mode:

1. **Set the resolution:**

Right click on the Windows® desktop → choose Properties → choose Settings → set the resolution.

2. **Set the refresh rate:**

See your graphic card's user guide for instructions.

Specification

Item	Description	Unit
Display Size	20"	Inch
Active Area *	408 (H) X 306 (V)	mm
Maximum Resolution *	1600 x 1200	dot

Pixels Pitch *	0.255	mm
Aspect Ratio	4 : 3	
Display Colors	16.7 M	
Brightness * (Typ.)	250	cd/m²
Contrast Ratio *	700 : 1	
Response Time (Tr+Tf) *	16	ms
View Angle *	170° (H) / 170° (V)	
Vertical Frequency	56 ~ 75 Hz	
Horizontal Frequency	31.5 ~ 80 KHz	
Refresh Rate	56 ~ 75 Hz	
Signal Interface (standard)	D-Sub (Analog)	
Power Consumption (Operation)	< 55 W	
Power Supply (Adapter)	AC 100V ~ 240V 47Hz ~ 63Hz	
	DC 12V / 5A	
OSD Language	Multi-Language	
Speaker	2 Watt X 2	
Accessory	VGA Cable X 1 Audio Cable X 1	
	Power Cord X 1 User Manual X 1	
	DC Adapter X 1	
Regulations	UL, FCC-B, CE, BSMI	

* These items depend on panel spec.

Cleaning Notice

1. Gently wipe the screen with a clean, soft, lens brush or a soft clean, lint-free cloth. This removes dust and other particles that can scratch the screen.
2. Do not apply pressure to the screen surface when wiping it clean.
3. Do not pour or spray any liquid directly onto the screen or case of the LCD monitor. Chemical cleaners may damage the screen or the LCD monitor.

Troubleshooting

LCD Pixel Statement

The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as black or colored dots. This has no effect on the recorded image and does not constitute a malfunction.

Normally, a 20" UXGA (1600 x 1200) display has nearly 6 million sub-pixels. There are 8 non-performing pixels on the LCD screen, which is only 0.0001% of the total sub-pixels. This percentage is acceptable for any inspection specifications.

- **There is no picture on the screen.**

A: Please check the color of the LED indicator on the LCD monitor.

1. **"GREEN"**: During normal operation the LED light will be green. If it is green and there is no picture contact the customer service line.
2. **"ORANGE"**: please check the connection of the VGA cable to the monitor and the connection to the computer.
3. **"NO POWER"**: Make sure the power cord is securely connected to the adapter and the light on the Adapter is green.

- **Missing Colors**

A: If any of the red, green, or blue colors are missing, check the signal cable to make sure it is tightened correctly. The pins in the cable could be loose and cause a bad connection.

- **No image**

- A:**
1. Make sure power button is ON.
 2. Check whether the LCD monitor and computer power cords are connected and whether there is a supply of power.

- **No Signal Input**

A: Check the signal connection between the computer and LCD monitor.

- **Image too bright / Image too dark**

A: Adjust brightness and contrast by OSD.

- **Irregular image**

- A:**
1. Check the signal connection between the computer and LCD monitor.
 2. Perform Auto Adjust.

- **Distorted image**

A: Reset the LCD monitor. (Perform the "Recall" function by OSD)

- **Image is not centered / Size is not appropriate**

- A:**
1. Use OSD Image Menu to adjust H. Position and V. Position.
 2. Check image size setting.
 3. Perform Auto Adjust.

- **Uneven color / Color too dark / Dark area distorted / White color is not white**

A: Use OSD Color Temperature Menu to adjust color setting.

- **No sound**

- A:**
1. Check the audio signal cable connection between the computer and LCD monitor.
 2. Maybe mis-press the **"+/MUTE"** button; try to press **"+/MUTE"** button to disable the volume MUTE function.